



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

09/849,510

05/04/2001

Xi Li

SAVI-001

8687

7590

05/19/2005

David B. Ritchie
THELEN REID & PREIST LLP
P.O. Box 640640
San Jose, CA 95164-0640

EXAMINER

WOO, RICHARD SUKYOON

ART UNIT

PAPER NUMBER

3639

DATE MAILED: 05/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/849,510

Applicant(s)

LI ET AL.

Examiner

Richard Woo

Art Unit

3639

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 February 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13, 15-29 and 31-51 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13, 15-29, 31-51 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

- 1) Applicant's amendments filed on February 14, 2005 has been entered.
- 2) Applicant's arguments filed February 14, 2005 have been fully considered but they are not persuasive.

In response to the applicant's argument that at best, McDonald provides storage at a remote computer accessible over a network, the examiner invites the applicant's attention to col. 6, lines 24-47 (the network can be LAN, WAN, or wired connection). Accordingly, McDonald discloses the storage of the tag-reader information at a location coupled to a data appliance.

In response to applicant's argument that Jansen et al. is nonanalogous art, it has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, the teaching of Jansen et al. is pertinent to the particular program with which the applicant was concerned, charging users a fee dependent on the number of using the particular service. Although the service being provided to the user may be different between Jansen et al. and McDonald, the purpose of Jansen et al. to solve the particular problem would have been pertinent to that of McDonald.

Applicant's arguments, filed February 14, 2005, with respect to Claims 49-51 have been fully considered and are persuasive.

- 3) The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim Objections

- 4) Claim 51 is objected to because of the following informalities:
In Claim 51, line 3, "repacing" should be changed to --replacing--.
Appropriate correction is required.

Claim Rejections - 35 USC § 103

- 5) Claims 1-13, 15-29 and 31-51 are rejected under 35 U.S.C. 103(a) as being unpatentable over McDonald (US 6,211,781) in view of Jansen et al. (US 6,243,450).

W.R.T. Claims 1, 17 and 45-46:

McDonald discloses a method including:

affixing a tag to each good to be tracked and to each conveyance used to store or carry the goods (see Figs. 1-2 for example);

marking the location of one of the goods at a data appliance and storing information on the location at a site server coupled to the data appliance (see Figs. 1-2, 4-5 and the descriptions thereof);

uploading the location information to a data center, the data center coupled to the site server (see generally Figs. and col. 11, line 61 – col. 12, line 3); and

Art Unit: 3639

compensating for missing information by using a previous tag read and a current tag read (see Claim 1, for example).

However, McDonald does not expressly disclose the method including:
charging users a fee dependent on the number services that the users used.

Jansen et al. is cited to show that a pay-per-use pay plan charges users a fee dependent on the number of using the specific internet service (see generally abstract and col. 2, lines 9-42).

Since the purpose of Jansen et al. to solve the particular problem would have been pertinent to that of McDonald, it would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the invention of McDonald such that the users are charged dependent on the usage or service (i.e. identifying the number of tracked goods to access the data center and view reports compiled using the location information regarding each tracked good), as taught by Jansen et al., for the purpose of providing the up-front cost of using the pay-per-use service (i.e. tracking service) which typically covers transaction fees and administration fees (col. 12, lines 47-48) and providing an improved method and apparatus for pay-per-use services and displaying billing information to the users.

W.R.T. Claims 2-13, 15-16 and 18-29, 31-32, 47-51:

Art Unit: 3639

W.R.T. Claims 2, 18, 47: The modified McDonald further discloses the method including:

aggregating one or more of the goods into a conveyance at a data point and wherein the marking includes indicating an aggregation event occurred at the data point (see *Supra* Figs. and Claims in McDonald and);

W.R.T. Claims 3, 19, 48: The modified McDonald further discloses the method, wherein the marking further includes performing aggregation-by-interference, wherein an aggregation event occurring at the location for a conveyance automatically indicates that the conveyance has been completely filled with items (*Id.*);

W.R.T. Claims 4, 20: The modified McDonald further discloses the method including performing de-aggregation-by-interference at a second data point, wherein a de-aggregation event indicating that all items have been removed from the conveyance is generated (see *Supra* Figs.);

W.R.T. Claims 5, 21: The modified McDonald further discloses the method, wherein the tag affixed to the one of the goods is a RFID tag and the marking includes scanning the tag affixed to the one of the goods (see *Supra* Figs. in McDonald);

W.R.T. Claims 6, 22: The modified McDonald further discloses the method, wherein one of the goods is stored in one of the conveyance, the marking includes scanning the tag affixed to one of the conveyance using a reader (*Id.*);

W.R.T. Claims 7, 23: The modified McDonald further discloses the method, wherein the marking includes scanning a tag using a tag reader (see *Supra tag reader* in McDonald);

Art Unit: 3639

W.R.T. Claims 8, 24: The modified McDonald further discloses the method, wherein the tag reader is coupled to a data appliance (see *Supra* Figs. in McDonald);

W.R.T. Claims 9, 25: The modified McDonald further discloses the method, wherein the tag reader is part of a data appliance (*Id.*);

W.R.T. Claims 10, 26: The modified McDonald further discloses the method, wherein the marking includes tracking the goods using GPS (see *Supra* Figs. in McDonald);

W.R.T. Claims 11, 27: The modified McDonald further discloses the method, wherein the storing utilizes the UDAP to communicate the location information from the data appliance to the site server (see Fig. 6 in McDonald, for example);

W.R.T. Claims 12, 28: The modified McDonald further discloses the method including accessing the data center and viewing the reports (*Id.*);

W.R.T. Claims 13, 29: The modified McDonald further discloses the method including aggregating a good into a conveyance when the good is loaded into the conveyance and de-aggregating the good from the conveyance when the good is unloaded from the conveyance (see *Supra*);

W.R.T. Claims 15, 31: The modified McDonald further discloses the method, wherein the compensating includes detecting that a missing tag read occurred by learning that a tag read was made on the good at a first location and at a third location, but not at a second location, wherein the good could not arrive at the third location without first passing through the second location (see Fig. 1 and the description thereof in McDonald); and

Art Unit: 3639

W.R.T. Claim 16, 32: The modified McDonald further discloses the method including filtering out any duplicative tag reads (see *Supra*).

W.R.T. Claim 49: The modified McDonald further discloses the method, wherein the compensating includes compensating for missing information about a good by using aggregation information derived from a previous tag read with and a current tag read to create a missing tag read for the good (see Claim 1).

W.R.T. Claim 50: The modified McDonald further discloses the method, wherein the compensating includes compensating for missing information about a second location by using location information from a previous tag read at a first location with location information from a current tag read at a third location to create a missing tag read for the good at the second location (see *Id.*).

W.R.T. Claim 51: The modified McDonald further discloses the method including:
receiving the missing information subsequent to the compensating; and
replacing the compensation information with the missing information (see *Id.*).

W.R.T. Claims 33, 36, 39 and 42:

McDonald discloses a system including:

a data center (see Figs. 1-2, 4) including compensation logic compensating for missing information by using a previous tag read and a current tag read (see *Supra* Claim 1);

one or more site servers coupled to the data center (see *Id.*); and

one or more tags (see Fig. 2), each of the tags affixed to a good or conveyance.

However, McDonald does not expressly disclose the system, wherein users are charged dependent on the number of service that the users have used.

Jansen et al. is cited to show that a pay-per-use pay plan charges users a fee dependent on the number of using the specific internet service (see generally abstract and col. 2, lines 9-42).

Since the purpose of Jansen et al. to solve the particular problem would have been pertinent to that of McDonald, it would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the invention of McDonald such that the users are charged dependent on the usage or service (i.e. identifying the number of tracked goods to access the data center and view reports compiled using the location information regarding each tracked good), as taught by Jansen et al., for the purpose of providing the up-front cost of using the pay-per-use service (i.e. tracking service) which typically covers transaction fees and administration fees (col. 12, lines 47-48) and providing an improved method and apparatus for pay-per-use services and displaying billing information to the users.

W.R.T. Claims 34-35, 37-38, 40-41 and 43-44:

The modified McDonald further discloses the system including:
wherein the tags and tags readers both utilize RFID technology (see abstract, Claims and Figs of McDonald); and

Art Unit: 3639

an Intransit Data Appliance and an Enterprise server, the enterprise server coupled to the data center and the IDA coupled to the enterprise server to transmit of data on the location of a good or conveyance using GPS (see Supra Figs. and Claims of McDonald).

Conclusion

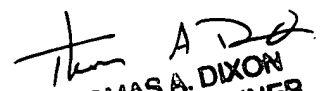
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Richard Woo whose telephone number is 571-272-6813. The examiner can normally be reached on Monday-Friday from 8:30 AM -5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Weiss can be reached on 571-272-6812. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Richard Woo
May 13, 2005



THOMAS A. DIXON
PRIMARY EXAMINER